

STEREO MOC Status Report
Time Period: 2007:099 - 2007:105

STEREO Ahead (STA) Status:

1. The following Ground System anomaly occurred during this reporting period:

- On day 103, realtime data was lost for 5 minutes beginning at 1504Z from station DSS-26 due to a requested power reset of JPL-SW1 Closed IOnet switch by the GSFC IP NOCC.

2. Ahead spacecraft performance continues to be very good with all subsystems performing nominally with the exception of the IMU 1 anomaly described below. The following special spacecraft events and anomalies occurred during this week:

- The average daily SSR playback volume for Ahead was 6.8 Gbits during this week.
- On day 101 at 0138Z, Autonomy Rule #16 (IMU 1 Health Monitor) executed, autonomously switching over from IMU 1 to IMU 2. The data surrounding the autonomy rule execution was captured in the G&C Black Box data which indicated that the rule fired due to IMU Gyro #1 failing it's Built In Test (BIT). Also captured in this data was indication that Gyro #1 experienced 4 Path Length Correction Resets in the 20 minutes leading up to the BIT failure. The IMU manufacturer has been brought into the loop and investigation into the IMU 1, Gyro #1 problem is ongoing. This problem had no effect on science data collection or spacecraft operations since the swap to IMU 2 occurred without incident.
- On day 102, IMU 1 was powered on for 40 minutes and on day 103 for 79 minutes to collect diagnostic snapshot data. Gyro #1 appeared to have come up nominally for these exercises.
- On day 102 a momentum dump was successfully executed using IMU 2 at 1902Z.

STEREO Behind (STB) Status:

1. The following Ground System anomaly occurred during this reporting period:

- On day 101, during the track on DSS-45 there were frequent dropouts on VC7 (real-time) data. These dropouts are the result of a problem with JMUG1, a GSFC router at JPL. The router was switched over to the backup router.

2. Behind spacecraft performance continues to be very good with all subsystems performing nominally. The following special spacecraft events occurred during this week:

- The average daily SSR playback volume for Behind was 9.3 Gbits during this week.
- On day 100 a contingency spacecraft ephemeris was loaded to EEPROM.